Date: Sat, 17 Jul 93 01:39:20 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #868

To: Info-Hams

Info-Hams Digest Sat, 17 Jul 93 Volume 93 : Issue 868

Today's Topics:

Communities that unduly restrict Amateur Radio operations CTCSS decoder chips availability ?

CW continued [long]

Dipole antenna construction ?

FT-530 mods

G5RV Antennas (2 msgs)

Ham software for Unix?

Handi-Finder anyone build? (2 msgs)

Icom, there when needed?

IRAU Contest

Microwave Ovens

Opinions of Heathkit gear

part number needed for Motorola service manual

People with funny ears

Range? Portable Transceivers 2 Watt.

TS50

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

\_\_\_\_\_\_

Date: Fri, 16 Jul 1993 16:10:30 GMT

From: pacbell.com!amdahl!amdcad!amdcl2!brian@network.UCSD.EDU

Subject: Communities that unduly restrict Amateur Radio operations

To: info-hams@ucsd.edu

(Paul Kasley WA9VYB) writes:

> The most insidious device I've come across is

- > "architectural review". Of course, when I ask if an
- > HF antenna is architecturally acceptable the inevitable response is in
- > the negative.

I've got a good story about "architectural review" to relate to the net. My wife (N5WCE) and I just made an offer on a house in a subdivision south of Austin that has an architectural review committee. Before we made the offer, we wrote the architectural review committee and requested a written statement indicating that we could put up a 60 foot tower. I wound up spending about half an hour on the phone with two members of the committee and then they signed it! No agreements of non-interference, curtailed hours, ugly antennas, etc.!

What's really remarkable about the whole thing is that we had chosen the subdivision as one we particularly liked, gotten the agreement, and then found the house. A little preparation went a long way here because the house was at a fair price and there were two offers made on it within 24 hours.

Here's hoping things keep working out as well w.r.t. antennas!

Brian McMinn N5PSS brian.mcminn@amd.com

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Date: 16 Jul 93 17:36:38 EST

From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa

Subject: CTCSS decoder chips availability ?

To: info-hams@ucsd.edu

In article <226541\$294@juha.fi>, riku@juha.fi (Riku Kalinen) wrote:
> I am currently searching for chips, which would decode CTCSS tones from audio
> signal.

Riku-

I suggest you get information about the products of "Communications Specialists". They are located in the U.S., and manufacture CTCSS encoders and decoders. Their model TS-32P is a field programmable CTCSS encoder-decoder, programmable by DIP switches. I would suspect the DIP switch leads could be interfaced to a CPU instead. They may be willing to sell just the chip.

I do not have information about their address. I have purchased their products from Amateur Electronic Supply. A.E.S. has a main office at 5710 W. Good Hope Road; Milwaukee, WI 53223.

## 73, Fred, K4DII

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Date: 17 Jul 93 06:26:50 GMT

From: ogicse!uwm.edu!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!osuunx.ucc.okstate.edu!

olesun!gcouger@network.UCSD.EDU
Subject: CW continued [long]

To: info-hams@ucsd.edu

In article <1993Jul16.135031.883@cyphyn.UUCP> randy@cyphyn.UUCP (Randy) writes:
>adams@chuck.dallas.sgi.com (Charles Adams) writes:

>: In article <CA82r2.HuI@srgenprp.sr.hp.com>, donrm@sr.hp.com (Don Montgomery)
writes:

>: ...stuff deleted...

>:

>: i posted this once before and i'm sure that everybody in the world thought
>: i was/am crazy. take a small point source, say cheap earphone. you know
> I tried the point source test....I get the same result, but as I change the
>pitch, I have to move the 'phone to left or right ( depending) to find the
>null.

I noticed this effect once when visiting my dad who is deaf and wears hearing aids. I was watching tv and heard a very high pitched sound. The sound I later found out was one of his hearing aids with full blown feed back, not un usual for hearing aids. The hearing aid was in another room and I could find a very sharp null by turing my head from side to side. It was certianly phase cancilation but in my case there was a reflected path so the acoustics of the room likely come into play.

Gordon AB5Dg

Gordon Couger

Agriculture Engineering Oklahoma State University

114 Ag Hall, Stillwater, OK 74074

gcouger@olesun.agen.okstate.edu 405-744-9763 day 624-2855 evenings

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Date: Fri, 16 Jul 1993 19:11:18 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net! ux1.cso.uiuc.edu!sdd.hp.com!col.hp.com!news.dtc.hp.com!srgenprp!

alanb@network.UCSD.EDU

Subject: Dipole antenna construction ?

To: info-hams@ucsd.edu

Mohan Pakkurti (mohan@tulip) wrote:

: Hello,

: I am waiting for the license and wanted to make an antenna for HF operation.

- : If I want to construct a center-fed dipole for the 7.1 Mhz band,
- : the dimension for the dipole is given as 65ft, 11in.
- : Now, is this the distance between the holes of the insulators at the
- : support ends (including the length of the middle insulator/spacer), or is it
- : just the length of the wire not including the middle spacer.

The short answer is it is the overall length, including center insulator. But it really doesn't make any difference, because the resonant length will vary from installation-to-installation depending on wire diameter, height above ground, proximity to nearby trees and conductors, angle between the two wires, etc.

It's best to cut the antenna a foot or two longer than the formula, put it up in the air, and measure the SWR across the band. If the lowest SWR occurs at the bottom of the band, then the antenna is too long. Lower it down and shorten it and try again. After a few iterations, you'll have it tuned up on the desired frequency.

- : And if I use a TS-520S transceiver and a dipole antenna made as in reference 1,
- : the transmitter and the antenna will be matched without me having to use
- : antenna tuners, and what about the SWR ?

Again, the SWR you end up with depends on the particular installation. An infinitely-thin dipole in free space it about 73 ohms, which would give a 1.46:1 SWR (with 50-ohm coax) at resonance. However, fatter wire and ground reflections tend to lower the impedance, so you typically get a pretty good match.

AL N1AL

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Date: 16 Jul 1993 12:27:30 -0600

From: orca.es.com!cnn.sim.es.com!moons.sim.es.com!not-for-mail@uunet.uu.net

Subject: FT-530 mods To: info-hams@ucsd.edu

I am still looking for mods for my NEW FT-530. I have read of mods for cellular and aircraft. HOW do you get these frequencies? I would prefer not to open the radio yet.

E-mail is best.

TNX

- -

Douglas L. Datwyler, WR70 Evans & Sutherland Computer Corp. preferred e-mail: datwyler@moons.sim.es.com

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Date: Fri, 16 Jul 93 17:34:15 GMT

From: butch!enterprise!news@uunet.uu.net

Subject: G5RV Antennas To: info-hams@ucsd.edu

In article <930714115524\_300@ccm.hf.intel.com> Cecil\_A\_Moore@ccm.hf.INTel.COM

(Cecil A Moore) writes:

>From: Cecil\_A\_Moore@ccm.hf.INTel.COM (Cecil A Moore)

>Subject: G5RV Antennas

>Date: 14 Jul 93 19:55:24 GMT

8>The demon-mailer bounced my last two messages so these are combined.

Hi Cecil! You knew I'd be reading anyway...right?

>>so...back to coax that survives the (ice) slides...73 from the Land >>of the Frozen Chosen, -=Joel - KC1SG=-

>Hey Joel, living in Arizona, I entirely forgot about the advantages >of coax during ice slides. If your SWR is high enough, it will even >melt 'em. Coil your coax across your driveway and never have to >shovel snow! 73, Cecil, KG7BK

Hey Cecil! Guess what? My neighbor has put up a "For Sale" sign on his house, so it's time to play antennas. I have some 12 ga copper-clad steel wire put away. I think I will make some super strong feeders with say teflon rod spacers that can survive ice slides. I had used 14 ga multistrand with the good old Johnson ceramic spacers, and that breaks easy with a minor slide <G>. Also, I could make a little "dog house" to put over the feeders where the roof overhangs, to provide some protection. I support the center of my G5RV with a 45-foot mast made of PVC pipe that is guyed with polyester rope. I could put a cross-arm at the base of the mast to support the copper clad steel feeders that run back to the window ledge.

-=Joel=-KC1SG

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Date: Fri, 16 Jul 1993 20:11:10 GMT

From: spsgate!mogate!newsgate!news@uunet.uu.net

Subject: G5RV Antennas To: info-hams@ucsd.edu In article <jchappel.23.0@sander.lockheed.com> jchappel@sander.lockheed.com (Joel Chappell) writes:

- .. I support the
- > center of my G5RV with a 45-foot mast made of PVC pipe that is guyed with > polyester rope. ...

Hi Joel...

At the risk of restarting the PVC thread, would you care to share the design of your mast? I'd be interested, and I'm sure some others would also.

Thanks & 73.... Mark AA7TA

P.S. My email to Joel bounced also...

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Date: Fri, 16 Jul 1993 17:04:37 GMT

From: spsgate!mogate!newsgate!news@uunet.uu.net

Subject: Ham software for Unix?

To: info-hams@ucsd.edu

I'm looking for ham related software to run under Unix, specifically 386BSD and X-windows. Things like nifty TNC terminal programs, satellite trakers, logging programs, etc. I know some of them exist but I wasn't paying attention when they were announced. Any info will be appreciated.

I'd also be interested to hear from anyone who is using a Unix box (any flavor) as a ham-shack computer.

Thanks & 73... Mark AA7TA

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Date: 16 Jul 93 15:16:56 EDT

From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!sgiblab!wetware!

spunky.RedBrick.COM!psinntp!psinntp!arrl.org@network.UCSD.EDU

Subject: Handi-Finder anyone build?

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, Nguyent@snowmass.ksc.nasa.gov (Tom) writes:

>I had some mods which seemed to help:

- >(1) Try using a variable cap and pot for the audible tone.
- >(2) Replace the 3-position DPDT switch (harder to find) with a SPST and

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connect pin 9 directly to ground
>(3) Try using other types of diodes (1N4148 didn't seemed to work as well
       as some others 1N914, 1N4151, 1N4153, etc... I even tried some Zener
>
>
       and Germaniums)
>If you have other ideas please pass them along...
>TNX,
>Tom
Mods for QST articles make great QST Hints and Kinks fodder! If anyone has
good mods for this or any other QST article, send them to our Hints
and Kinks editor. If you get published, not only will you be recognized
by your fellow hams as a great guru and all-knowing sage, we will
send you $20 besides. :-).
73 from ARRL HQ, Ed
Ed Hare, KA1CV
                                ehare@arrl.org
American Radio Relay League
225 Main St.
Newington, CT 06111
                                "The goal of every engineer is to
(203) 666-1541 - voice
                                retire without getting blamed for a
                                major catastrophe." -- Scott Adams
ARRL Laboratory Supervisor
RFI, xmtr and rcvr testing
                                and Dilbert
Date: 16 Jul 93 11:21:21 EST
From: titan.ksc.nasa.gov!titan.ksc.nasa.gov!nntp@ames.arpa
Subject: Handi-Finder anyone build?
To: info-hams@ucsd.edu
In article <2255eeINNshv@mojo.eng.umd.edu>, tedwards@eng.umd.edu (Thomas Grant
Edwards) says:
>I am curious what kind of results people have had with the
>"handi-finder" from QST a couple of months ago. I have mine
>basically working, but I haven't been able to do a real
>fox-hunt style test on it yet.
>I wonder if the bow tie arrangement could be changed to
>increase the amplitude of the apparent audio signal from
>the oscillator, and to increase the signal received by the
>antenna, because weak signals don't appear to be easily
>DF'ed using the system.
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>-Thomas > N3HAU

Hi! I built 4 of them. 1 identical to the plans and another using double ducky

system. The third has two single full wave element as antennas. Finally, the fourth (still in work) will have two 3-element beams. It seems to be more directive (better nulling) when the antennas are spaced at least a quarter wave (half is better) away from each other. I have used the first two in several local fox hunts and was very successful (second, third, first place). I'm recently sold the first two equipment at a tailgate (\$\$\$ for more parts) and currently using the third along with working on the fourth.

I had some mods which seemed to help:

- (1) Try using a variable cap and pot for the audible tone.
- (2) Replace the 3-position DPDT switch (harder to find) with a SPST and connect pin 9 directly to ground
- (3) Try using other types of diodes (1N4148 didn't seemed to work as well as some others 1N914, 1N4151, 1N4153, etc... I even tried some Zener and Germaniums)

If you have other ideas please pass them along...  $\mathsf{TNX}$ ,

Tom

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Date: 16 Jul 93 23:17:57 GMT

From: att-out!cbnewsd!russell@RUTGERS.EDU

Subject: Icom, there when needed?

To: info-hams@ucsd.edu

This post is not meant to put down Icom. I just wish to relay a story, one that is not over yet. Whether there is a happy ending or a sad ending to this story, I'll let you now when I find out.

My W2A was sent in for service. It was in once before when one side of the radio stopped functioning due to a bad solder joint. That time it was under warranty ... this time it was not as it is almost 2 years old.

The W2A had been scanning for a good part of the day. It was sitting on my desk when I saw it was off. I use the 30 minute off timer so figuring that's what turned it off, I turned it back on. Only problem was that it didn't turn on. I figured the battery was dead and removed it and put on my other battery pack. The W2A would still not turn on. Thinking that I may not have charged the other battery, I connected the

W2A to my regulated power supply. Still no power up. I turned off the power supply and removed the battery pack. As I looked at the W2A, I caught a whiff of that burnt electrical component smell. How did this happen?

I sent the W2A to Icom and got a message on my answering machine a quick 4 days after sending it to them. The message said "your W2A is not economical to repair". Hu? I never even thought of that possibility.

I called the next day and was told that the unit would cost over \$400 to repair! All the boards needed to be replaced except the logic board which was able to be repaired. One possible explanation given to me (after I explained to the technician how the radio died) was that it could have been caused by reverse polarity. From the battery packs? The unit died while under battery power. A check of my second battery pack showed that it was charged up. I'd love to know what really happend.

Maybe I just bought the wrong radio at the wrong time. I know this is a very unusaul position to be in, but I don't think that paying about \$529 (at the time) for an Ht and then having to junk it in less than 2 years is acceptable.

The technician I spoke to said that someone from their main office is going to call me. I have no idea if Icom has a set way of handling this type of unusual situation, but I'll find out. Then I can let all of you know if Icom is there for you when you really need them.

73,

Russell Keating, N9LIL -----> Send email to: russell1@ihlpb.ATT.COM

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Date: Fri, 16 Jul 1993 18:54:07 GMT

From: news.kpc.com!kpc!nat@decwrl.dec.com

Subject: IRAU Contest To: info-hams@ucsd.edu

Ηi,

What is the date for the contest. Since I live in San Jose California what is my Contest IRAU region 6, 7, or 8. I looked up the April QST and it said the contest was July 10th in which case this question is moot. In either case I could use this information in the next years contest.

Thanks in advance.

Nat.

- -

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Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc. nat@kpc.com 2630 Walsh Avenue Phone 408 987 3341 Santa Clara, California 95051.

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Date: 16 Jul 93 21:05:12 GMT

From: gatech!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!

csn!news.sinet.slb.com!rag.austin.nam.slb.com!slcs.slb.com!luhn@RUTGERS.EDU

Subject: Microwave Ovens To: info-hams@ucsd.edu

Has anyone converted a microwave oven into a 2.4 ghz beacon? Seems like it would mount nicely on a tower using the turntable as a rotator. Any help would be appreciated. A WT Grant model conversion is preferred. Maybe the timer could be used to turn the transmit on and off for satelites.

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Date: Fri, 16 Jul 1993 19:01:34 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!sdd.hp.com!col.hp.com!news.dtc.hp.com!srgenprp!alanb@network.UCSD.EDU

Subject: Opinions of Heathkit gear

To: info-hams@ucsd.edu

Mike White (m14494@mwvm.mitre.org) wrote:

: ... When

: compared to commercial rigs, they're just not that

: sensitive, selective or stable. Also, most have

: few of the features that are now common on modern rigs.

I think you're still being a bit too hard on Heathkit. Take the SB-102, for example. It doesn't have a phase-locked loop, digital readout, or 100 memories, but neither did any other rig of its day. It does have a 1 kHz readout dial, good stability, and adequate sensitivity and selectivity.

Or an even older rig like the Apache transmitter / Mohawk receiver. They were both pretty good radios for their day.

AL N1AL

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Date: Sat, 17 Jul 1993 00:15:17 GMT

From: spsgate!mogate!newsgate!NewsWatcher!user@uunet.uu.net

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To: info-hams@ucsd.edu
In article <1993Jul15.211652.4660@Princeton.EDU>,
chinatti@phoenix.Princeton.EDU (Stephen Anthony Chinatti) wrote:
> Does anyone have the part number for the service manual for a Motorola
Worldwide service center for Motorla parts, manuals, etc.:
>>>> 1-800-422-4210 <<<<<
* Chris Terwilliger, AA7WD
                                         a229aa@email.sps.mot.com *
* Motorola
                                "And now, the sequence of events, *
* 2100 E. Elliot Rd. EL374
                               in no particular order."
* Tempe, AZ 85284
                                                    - Dan Rather *
Date: Fri, 16 Jul 1993 20:35:12 GMT
From: sgi!twilight!odin!chuck.dallas.sgi.com!adams@ames.arpa
Subject: People with funny ears
To: info-hams@ucsd.edu
In article <226v6kINN3d7@emx.cc.utexas.edu>, oo7@emx.cc.utexas.edu (Derek Wills)
|> Hmmmm, I tried this, but the only source I had was one of those thingies
                                                  good term ----> ^^^^^^
|> they put inside birthday cards that play "Happy Birthday" when you open
|> the card - fairly pure tones but of course different pitches. I couldn't
> reproduce this effect, but then I can't copy CW at 60+ wpm either....
|>
|> I do know that when I dropped said sounder (sounding happily away) in
|> my very messy office, it took ages to find it - I eventually located
   yes, Derek, you too can do 60wpm......
|> it somewhere very different from where I thought the sound source was.
|> So perhaps my ears are only Slightly Silly and that's why I can't do
| > 60 + wpm.
|>
|> Hey, wait! E'en as I was penning these words, I thought of another way.
|> I set up my terminal to do a continuous (keyboard) beep, and waggled my
|> head around in front of it. The sound definitely goes down in volume at
> one place, it doesn't quite disappear but almost. Wow, perhaps I can do
l> 60+ now!
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Subject: part number needed for Motorola service manual

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.....as i said above, yes you can.... think positive!
|>
|> This has lots of interesting possibilities especially if, as Randy, says,
> the null point is different for different tones. It means that if you
|> are listening to two closely-spaced CW signals via a loudspeaker, you
|> can null one of them and still hear the other one by putting your head
|> in the right place in front of the speaker. Gad, it's almost enough to
|> make you want to listen to 40m DX phone signals, if you can remove the CW
|> ones with this technique. It would be nice to do it the other way round!
   you can do this with a 100 cycle audio filter :-)
|>
|>
|> Derek Wills (AA5BT, G3NMX)
|> Department of Astronomy, University of Texas,
                 ^^^^^^ ok, next we wanna hear about the UFOs :-)
|> Austin TX 78712. (512-471-1392)
|> oo7@astro.as.utexas.edu
July 16 1993 - National Enquirer Headlines - UT Astronomy Professor gets
              message in morse code from UFO. now applying to ARRL DXCC
               committee for first ever CW qso with ET. photos at 11 on CNN.
:-) next thing you know they'll be wanting the colonies back! :-)
"Be not too hard for life is short and nothing is given to man." - J. Baez
  Chuck Adams, K5F0 - CP60
  adams@sgi.com
Date: 16 Jul 93 17:14:33 GMT
From: gatech!howland.reston.ans.net!sol.ctr.columbia.edu!news.unomaha.edu!
cwis.unomaha.edu!ncc2001@RUTGERS.EDU
Subject: Range? Portable Transceivers 2 Watt.
To: info-hams@ucsd.edu
During Field Day, I worked my Realistic HTX-202 at 3 watts and a homemade 1/4
wave ground plane antenna. 2m really opened up for me for a while and I made
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a simplex contact of 25+ miles! (yes, my call is in the mail. I was using

the Novice Shack Call. Please no flames. Thankyou)

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Date: 16 Jul 93 17:45:35 EST

From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa

Subject: TS50

To: info-hams@ucsd.edu

In article <930716072716.1636@MAR65.MAR.ORA.FDA.GOV>,
ODONNELLP@MAR65.MAR.ORA.FDA.GOV wrote:

- > Well, its not 2 amps on receive! Mine draws less than 1 amp, when
- > first powered up, no signal present, with audio on full! It's not
- > as low as I thought either, but certainly not 2 amps! It doesn't
- > even get to a full 1 amp with the backlight lamps on full brightness.
- > I just thought of a question though that might make some difference,
- > but with the emphasis on MIGHT. I'm guessing, for sure, but I don't
- > have the memories fully used up either. Only have about 20 or so
- > with stuff in 'em. Wonder if that could influence the power draw?

Paul-

I seriously doubt the contents of the memory would affect current. I had the understanding that the receive current rating assumed the combination of maximum back lighting and a maximum volume tone being received. Mine doesn't get hot enough to make me think it is disipating 25 watts!

73, Fred, K4DII

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End of Info-Hams Digest V93 #868 \*\*\*\*\*\*\*\*\*\*\*